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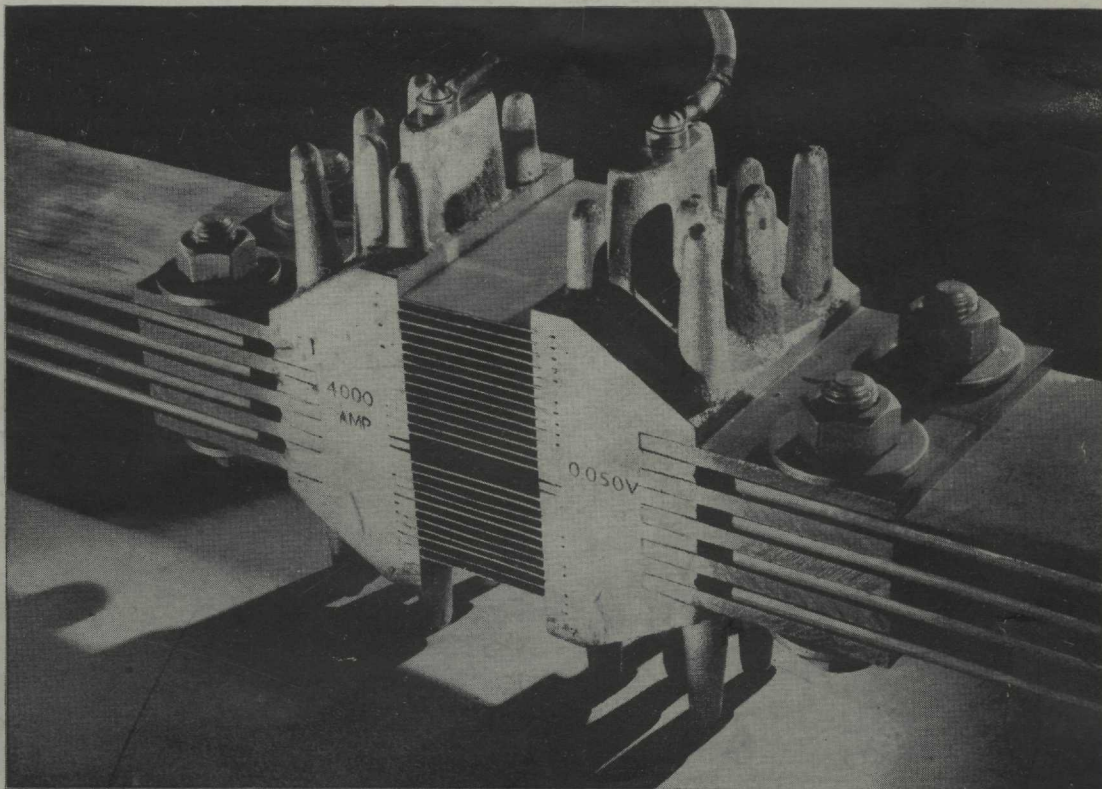
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THE OHIO STATE ENGINEER

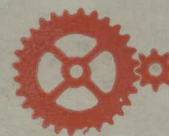


MASSIVE BUT ACCURATE SHUNT

(See Story on Page 18)

JUNE, 1940

VOL. XXIII



No. 7

FIFTEEN CENTS

**MEMBER OF THE ENGINEERING
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WHEN you receive your diploma and enter upon your career as a mechanical engineer you will find a sound knowledge of bearing design and application one of your most valuable assets.

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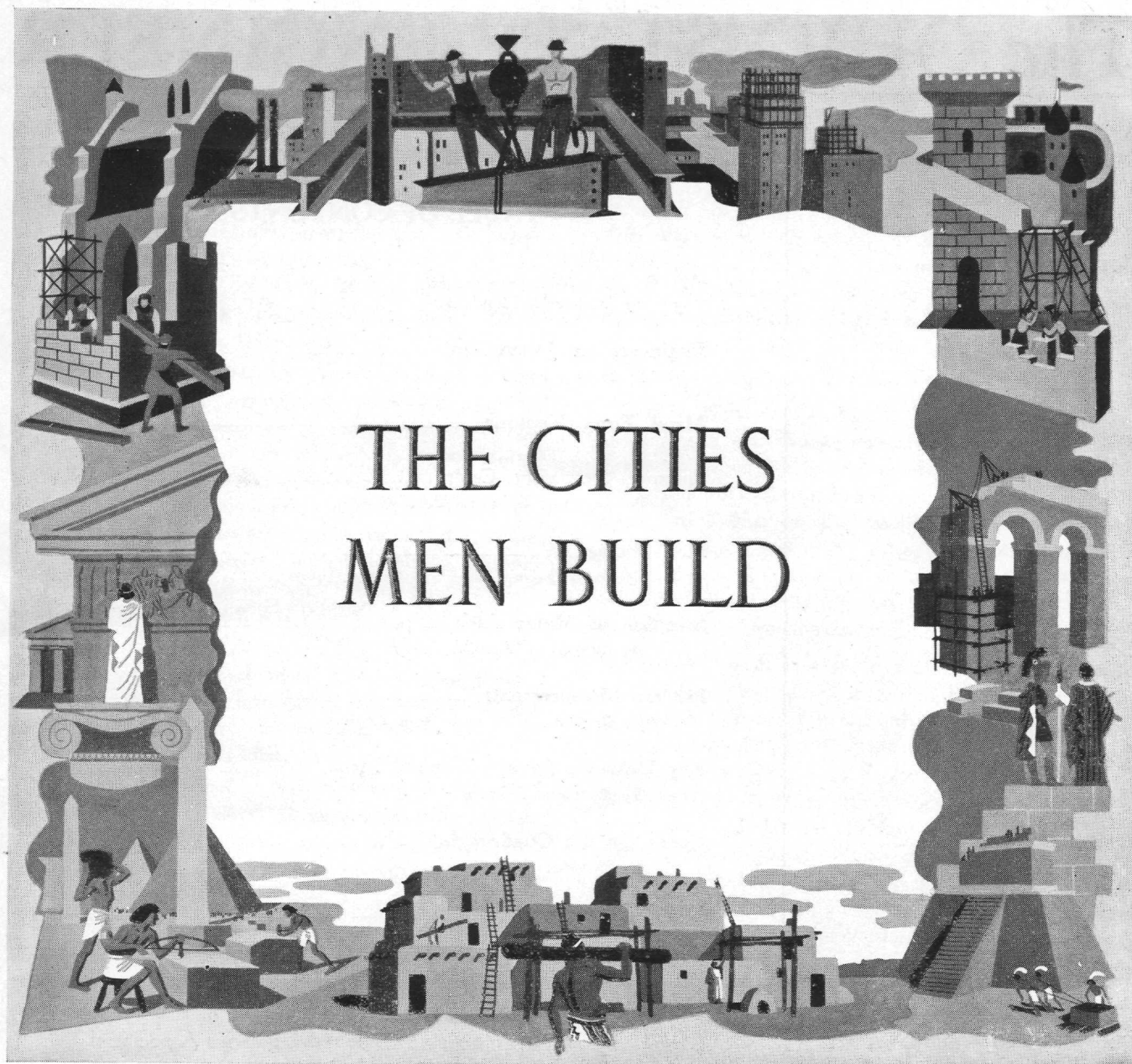
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THE CITIES MEN BUILD

FROM THE EARLIEST times man has endeavored to create communities for reasons of safety, comfort and fellowship.

But as he built his towns and cities he faced new difficulties. None of these had greater bearing on his well-being than the removal and disposal of waste. To this day the sanitation of cities has remained one of the most pressing problems of urban life.

Yet here again modern chemistry is giving material aid to sanitary engineers who are meeting this municipal problem in a truly remarkable manner.

Raw sewage is about 97 per cent water and 3 per cent organic matter. The basic task is to extract the organic matter from the water. The solids must be precipitated in settling tanks, then coagulated—causing the organic particles to cling together. These primary processes are necessary so that the coagulated sewage,

or sludge, can be dried and disposed of either as fertilizer or by burning.

For these processes modern practice calls for the use of Dow Ferric Chloride and many sewage disposal plants are designed accordingly, including the Southwest Plant recently completed in Chicago, the largest activated sludge plant in the world, with a capacity of 400,000,000 gallons a day.

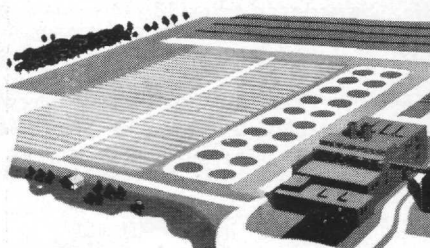
Dow Ferric Chloride has proved to be a remarkably efficient conditioning agent. Engineers favor it also because it permits a much simpler design for disposal

plants and assures a minimum of chemical and operating costs as well.

In this contribution to sanitary engineering we find another practical example of the far-reaching value of Dow's chemical developments.

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CHEMICALS INDISPENSABLE
TO INDUSTRY

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The Ohio State Engineer and its staff wishes our readers the best of summer vacations and hope that you will all be with us next year.

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